



## Daftar Pustaka

- Adam, JM. 2009. *Buku Ajar Ilmu Penyakit Dalam Jilid III Edisi V*. Jakarta: Balai Penerbit FKUI
- Alberti, K.G.M.M., Eckel, R.H., Grundy, S.M., Zimmet, P.Z., Cleeman, J.L., Donato, K.A., et al., 2009. Harmonizing the metabolic syndrome: A joint interim statement of the international diabetes federation task force on epidemiology and prevention; National heart, lung, and blood institute; American heart association; World heart federation; International . *Circulation* 120: 1640–1645. doi:10.1161/CIRCULATIONAHA.109.192644
- Anggrahini, D.W., Emoto, N., Nakayama, K., Widyantoro, B., Adiarto, S., Iwasa, N., et al., 2009. Vascular endothelial cell-derived endothelin-1 mediates vascular inflammation and neointima formation following blood flow cessation. *Cardiovasc. Res.* 82: 143–151. doi:10.1093/cvr/cvp026
- Asgary, S., Afshani, M.R., Sahebkar, A., Keshvari, M., Taheri, M., Jahanian, E., et al., 2016. Improvement of hypertension, endothelial function and systemic inflammation following short-term supplementation with red beet (*Beta vulgaris L.*) juice: A randomized crossover pilot study. *J. Hum. Hypertens.* 30: 627–632. doi:10.1038/jhh.2016.34
- Åstrand, H., Stålhand, J., Karlsson, J., Karlsson, M., Sonesson, B., & Länne, T., 2011. In vivo estimation of the contribution of elastin and collagen to the mechanical properties in the human abdominal aorta: Effect of age and sex. *J. Appl. Physiol.* 110: 176–187. doi:10.1152/japplphysiol.00579.2010
- Babarykin, D., Smirnova, G., Pundinsh, I., Vasiljeva, S., Krumina, G., & Agejchenko, V., 2019. Red Beet (<i>Beta vulgaris</i>) Impact on Human Health. *J. Biosci. Med.* 07: 61–79. doi:10.4236/jbm.2019.73007
- Borghi, Claudio, 2002. Interaction between hypercholesterolemia and hypertension implication for therapy. *Curr. opinion Nephrol. Hypertens.* 11: 489–496.
- Brown, L., & Panchal, S.K., 2011. Rodent models for metabolic syndrome research. *J. Biomed. Biotechnol.* 2011. doi:10.1155/2011/351982
- Clifford, T., Constantinou, C.M., Keane, K.M., West, D.J., Howatson, G., Stevenson, E.J., et al., 2017. The plasma bioavailability of nitrate and betanin from Beta vulgaris rubra in humans. *Eur. J. Nutr.* 56: 1245–1254. doi:10.1007/s00394-016-1173-5
- Clifford, T., Howatson, G., West, D.J., & Stevenson, E.J., 2015. The potential benefits of red beetroot supplementation in health and disease. *Nutrients* 7: 2801–2822. doi:10.3390/nu7042801
- Ganong, 2010. Blood as a Circulatory Fluid & the Dynamics of Blood & Lymph Flow, in: Ganong's Review of Medical Physiology. The McGraw-Hill Companies, p. 547.
- Ganong, WF.2012. Ganong's Medical Physiology. Terjemahan M.Djuhari Widjajakusumah. Edisi ke 24. Jakarta: EGC



- Ghancheva.s, M.Zhelyazkova.Savova, B.G. et. a., 2015. Experimental model of metabolic syndrome in Rats. *Scr. Sci. Media* 47: 14–21.
- Gunawan, H., Sitorus, P., & Rosidah, R., 2018. Pengaruh Pemberian Ekstrak Etanol Herba Poguntano (Picria FelTerraee Lour.) Terhadap Profil Lipid Tikus Putih Jantan Dislipidemia. *Talent. Conf. Ser. Trop. Med.* 1: 230–236. doi:10.32734/tm.v1i1.81
- Hobbs, D.A., Kaffa, N., George, T.W., Methven, L., & Lovegrove, J.A., 2012. Blood pressure-lowering effects of beetroot juice and novel beetroot-enriched bread products in normotensive male subjects. *Br. J. Nutr.* 108: 2066–2074. doi:10.1017/S0007114512000190
- Intengan, H.D., & Schiffrin, E.L., 2000. Structure and mechanical properties of resistance arteries in hypertension: Role of adhesion molecules and extracellular matrix determinants. *Hypertension* 36: 312–318. doi:10.1161/01.HYP.36.3.312
- Jani, Y., Kamberi, A., Ferati, F., Rexhepi, A., Pocesta, B., Orovcane, N., et al., 2014. Influence of dyslipidemia in control of arterial hypertension among type-2 diabetics in the western region of the Republic of Macedonia. *Am. J. Cardiovasc. Dis.* 4: 58–69.
- Johnson, R.J., Segal, M.S., Sautin, Y., Nakagawa, T., Feig, D.I., Kang, D.H., et al., 2007. Potential role of sugar (fructose) in the epidemic of hypertension, obesity and the metabolic syndrome, diabetes, kidney disease, and cardiovascular disease1–3. *Am. J. Clin. Nutr.* 86: 899–906. doi:10.1093/ajcn/86.4.899
- Justyna, W., 2017. Effect Of Organic and Inorganic nitrat on aortic and carotic Hemodynamic in Heart Failure and Preserved Ejection. *Physiol. Behav.* 176: 139–148. doi:10.1016/S.Physbeh.2017.03.040
- Kanner, J., Harel, S., & Granit, R., 2001. Betalains - A new class of dietary cationized antioxidants. *J. Agric. Food Chem.* 49: 5178–5185. doi:10.1021/jf010456f
- Kapil, V., Milsom, A.B., Okorie, M., Maleki-Toyserkani, S., Akram, F., Rehman, F., et al., 2010. Inorganic nitrate supplementation lowers blood pressure in humans: Role for nitrite-derived no. *Hypertension* 56: 274–281. doi:10.1161/HYPERTENSIONAHA.110.153536
- Kobayasi, R., Akamine, E.H., Davel, A.P., Rodrigues, M.A.M., Carvalho, C.R.O., & Rossoni, L. V., 2010. Oxidative stress and inflammatory mediators contribute to endothelial dysfunction in high-fat diet-induced obesity in mice. *J. Hypertens.* 28: 2111–2119. doi:10.1097/HJH.0b013e32833ca68c
- Lee, J.H., Son, C.W., Kim, M.Y., Kim, M.H., Kim, H.R., Kwak, E.S., et al., 2009. Red beet (Beta vulgaris L.) leaf supplementation improves antioxidant status in C57BL/6J mice fed high fat high cholesterol diet. *Nutr. Res. Pract.* 3: 114. doi:10.4162/nrp.2009.3.2.114
- Li, Y., Lu, Z., Zhang, X., Yu, H., Kirkwood, K.L., Lopes-Virella, M.F., et al., 2015. Metabolic syndrome exacerbates inflammation and bone loss in periodontitis. *J. Dent. Res.* 94: 362–370. doi:10.1177/0022034514561658
- Longo, Dan L. MD., Kasper, Dennis L. MD., et al., 2012. No TiHarrison's Principle of Internal Medicine ed.18 Chapter 231: Rheumatoid Arthritistle.



- Mescher AL, 2016. The Circulatory system. In: Junqueira's basic histology, 14th ed. McGraw-Hill Education, New York.
- Michiels, C., 2003. Endothelial cell functions. *J. Cell. Physiol.* 196: 430–443. doi:10.1002/jcp.10333
- Mirmiran, P., Houshialsadat, Z., Gaeini, Z., Bahadoran, Z., & Azizi, F., 2020. Functional properties of beetroot (*Beta vulgaris*) in management of cardio-metabolic diseases. *Nutr. Metab.* 17: 1–15. doi:10.1186/s12986-019-0421-0
- Otsuka.t, H.Takada, Y.N. et. a., 2015. Dyslipidemia and the risk of developing hypertension in a working-age male population. *J. Am. Heart Assoc.* 5: 1–9. doi:10.116/AHA.115.003053
- Otsuka, T., Takada, H., Nishiyama, Y., Kodani, E., Saiki, Y., Kato, K., et al., 2015. Dyslipidemia and the risk of developing hypertension in a working-age male population. *J. Am. Heart Assoc.* 5: 1–9. doi:10.1161/JAHA.115.003053
- P.Sugiyono, 2016. Impact of Red Beetroot juice on vascular endothelial function and cardiometabolic response to a high-fat meal in middle-age/older adult with overweight and obesity: a randomized, double blind, placebo-controlled, crossover trial. *J. Chem. Information dan Model.* 53: 1689–1699. doi:10.1017/CBO9781107415324.004
- Sa'Adah, N.N., Purwani, K.I., Nurhayati, A.P.D., & Ashuri, N.M., 2017. Analysis of lipid profile and atherogenic index in hyperlipidemic rat (*Rattus norvegicus* Berkenhout, 1769) that given the methanolic extract of Parijoto (*Medinilla speciosa*). *AIP Conf. Proc.* 1854. doi:10.1063/1.4985422
- Shankar, S.S., & Steinberg, H.O., 2013. Insulin resistance and hypertension. *Endocr. Hypertens. Underlying Mech. Ther.* 65212: 239–250. doi:10.1007/978-1-60761-548-4\_12
- Siervo, M., Lara, J., Ogbonwan, I., & Mathers, J.C., 2013. Inorganic Nitrate and Beetroot Juice Supplementation Reduces Blood Pressure in Adults: A Systematic Review and Meta-Analysis. *J. Nutr.* 143: 818–826. doi:10.3945/jn.112.170233
- Sk, J., Shenoy, A., & Hegde, K., 2018. a Review on Beta Vulgaris ( Beet Root ). *Int. J. Pharma Chem. Res.* 4: 136–140.
- standing, 2016. smooth muscle and the cardiovascular and lymphatic system, 41st ed.
- Virani, S.S., Alonso, A., Benjamin, E.J., Bittencourt, M.S., Callaway, C.W., Carson, A.P., et al., 2020. Heart disease and stroke statistics—2020 update: A report from the American Heart Association, Circulation. doi:10.1161/CIR.0000000000000757
- Waghmare, L.S., & Srivastava, T.K., 2016. Conceptualizing physiology of arterial blood pressure regulation through the logic model. *Adv. Physiol. Educ.* 40: 477–479. doi:10.1152/advan.00074.2016
- Wengrofsky, P., Lee, J., & Makaryus, A.N., n.d. Dyslipidemia and Its Role in the Pathogenesis of Atherosclerotic Cardiovascular Disease : Implications for Evaluation and Targets for Treatment of Dyslipidemia Based on Recent Guidelines.
- Wilkinson, I.B., Prasad, K., Hall, I.R., Thomas, A., MacCallum, H., Webb, D.J., et al., 2002. Increased central pulse pressure and augmentation index in



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NUR AINI HANDAYANI, Dr. dr. Denny Agustiningih, M.Kes, AIFM.; dr. R. Jajar Setiawan, M.Sc, Ph.D  
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- subjects with hypercholesterolemia. *J. Am. Coll. Cardiol.* 39: 1005–1011.  
doi:10.1016/S0735-1097(02)01723-0
- Wong, S.K., Chin, K.Y., Suhaimi, F.H., Fairus, A., & Ima-Nirwana, S., 2016.  
Animal models of metabolic syndrome: a review. *Nutr. Metab.* 13: 1–12.  
doi:10.1186/s12986-016-0123-9
- Zafar, M.A., Peterss, S., Ziganshin, B.A., & Elefteriades, J.A., 2018. Histology of  
Aortic Disease and Progression of Aortic Dissection From Acute to Chronic,  
New Approaches to Aortic Diseases from Valve to Abdominal Bifurcation.  
Elsevier Inc. doi:10.1016/B978-0-12-809979-7.00003-1
- Zivkovic, A.M., German, J.B., & Sanyal, A.J., 2007. Comparative review of diets  
for the metabolic syndrome: Implications for nonalcoholic fatty liver disease.  
*Am. J. Clin. Nutr.* 86: 285–300. doi:10.1093/ajcn/86.2.285